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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/904,084	07/12/2001	Dongming Zhu	33253US1	1872
116	7590	03/15/2004	EXAMINER	
PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108			MARCANTONI, PAUL D	
			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 03/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/904,084	ZHU ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Paul Marcantoni	1755	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 2/4/04 amdmnt and response.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)              | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other: _____                                    |

Applicant's arguments filed 2/4/04 have been fully considered but they are not persuasive.

Prior Art Rejection:

The prior art rejection over Fehrenbacher (US Patent No. 3,634,113) has been withdrawn because this reference does not teach any of the claimed Group B dopants for applicants' instant invention.

The applicants' amendment of claim necessitated the new grounds of rejection below:

35 USC 112 Second Paragraph:

Claims 1-33 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.

Claims 1-33 are indefinite, especially with respect to all independent claims (e.g. for example see claims 1,8, 16 as well as new claim 32), as there is no distinction between the primary stabilizer which can be a rare earth oxide such as dysprosium oxide or erbium oxide, the group A dopant which only needs to be a rare earth oxide, and group B dopant which contains other rare earth oxides. How does one distinguish between 2 or 3 of these components if they are the same? It would not appear to make sense in that regard. There is nothing in the claims (independent) from showing that at least the rare earth oxides used are different.

Applicants should amend their claim so there is no vagueness with respect to which rare earth metal oxides are the primary stabilizer, group A dopant, and group B

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dopant. By showing that they are all different rare earth oxides for each of these three groups is how applicants should overcome this rejection.

The applicants' amendment also necessitated the following new grounds of rejection:

New Matter:

Claims 1-33 are rejected under the first paragraph of 35 USC 112 and 35 USC 132 as the specification as originally filed does not provide support for the invention as is now claimed.

The newly added negative limitations added to claims 1, 8, 16, and 32 (independent claims) of "but excluding those species contained in said base oxide, group B dopant and primary stabilizer groups is new matter. There is no support for defining the group A dopant which consists of rare earth metal oxides by further adding a negative limitation to exclude the base oxide, group B dopant and primary stabilizer groups.

While the examiner said the independent claims were also vague as there was no way to distinguish the rare earth metal oxides of the various component groups (primary stabilizer, group A dopant, group B dopant) and said they should amend their claim to remove the vagueness, it was assumed that applicants actually had support for any amendments they made. Yet, they do not have support for excluding the other components in an effort to further define the group A dopant.

The applicants also had a telephone interview with the examiner and indicated that the examiner agreed that there amendment would overcome the 35 USC 112 second paragraph rejections. It was also implicit in the examiner's agreement that applicants actually had support from their original disclosure for negative limitations or language further defining the group A "excluding" the other rare earth oxide components. Yet, applicants do not have support for this negative limitation and it is thus new matter.

It is the examiner's position that even if the applicants were able to remove the new matter, it does not resolve the indefiniteness issue because there is still no way to distinguish between the primary stabilizer, group A dopant, and group B dopant. Applicants may consider filing a CIP to add language to their disclosure which allows for claims that define the group A dopant by "excluding" the other rare earth oxides. It does not seem there is any way to overcome this problem in the original disclosure.

Nevertheless, the applicants' amendments necessitated these new grounds of rejection and the finality of this office action is now proper.


Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Marcantoni whose telephone number is 571-272-1373. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Paul Marcantoni  
Primary Examiner  
Art Unit 1755